WHAT IS CLAIMED IS:

1. An exothermic reaction mixture comprising the following reaction components:

a) exothermic generating particles;
b) a volatile component;
c) an anti-foaming agent; and
d) a buffer;

wherein the reaction mixture is suspended in a continuous phase water soluble coating comprising at least one water soluble coating ingredient comprising PEG having a molecular weight from 2000-6000.

2. The reaction mixture of claim 1 wherein the reaction components further comprise an aqueous solution.

3. The reaction mixture of claim 2 wherein when the reaction components are mixed together, the temperature of the reaction mixture increases to a Set Temperature that is greater than about 35°C and less than about 75°C.

4. The reaction mixture of claim 3 wherein the reaction mixture remains within 15°C of the Set Temperature for at least about 45 minutes.

5. The reaction mixture of claim 1 wherein the volatile component is selected from the group consisting of a perfume, a fragrance, an insect repellent, a fumigant, a disinfectant, a bactericide, an insecticide, a pesticide, a germicide, an acaricide, a sterilizer, a deodorizer, a fogging agent and mixtures thereof.

6. The reaction mixture of claim 1 wherein the volatile component is selected from the group consisting of a musk oil, civet, castreum, ambergris, plant perfumes, sandalwood oil, neroli oil, bergamot oil, lemon oil, lavender oil, sage oil, rosemary oil, peppermint oil, eucalyptus oil, menthol, camphor, verbena oil, citronella oil, cauout oil, salvia oil, clove oil, chamomille oil, sandalwood oil, costus oil, labdanum oil, broom extract, carrot seed extract, jasmine extract, minmosa extract, narcissus extract, olibanum, extract, rose extract, acetophenonene, dimethylinadane derivatives, naphthaline derivatives, allyl caprate, .alpha.-amylcinnamic aldehyde, anethole, anisaldehyde, benzyl acetate,

benzyl alcohol, benzyl propionate, borneol, cinnamyl acetate, cinnamyl alcohol, citral citronnellal, cumin aldehyde, cyclamen aldehyde, decanol, ethyl butyrate, ethyl caprate, ethyl cinnamate, ethyl vanillin, eugenol, geraniol, exenol, alpha.-hexylcinnamic aldehyde, hydroxycitrolnellal, indole, iso-amyl acetate, iso-amyl iso-valeratek iso-eugenol, linalol, linalyl acetate, p-methylacetophenone, methyl anthranilate, methyl dihydroasmonate, methyl eugenol, methyl-.beta.-naphthol ketone, methylphenhlcarbinyl acetate, musk ketol, musk xylol, 2,5,6-nanodinol, .gamma.-nanolactone, phenylacetoaldehydodimethyl acetate, beta.-phenylethyl alcohol, 3,3,5-trimethylcyclohexanol, .gamma.-undecalactone, undecenal, vanillin, and mixtures thereof.

7. The reaction mixture of claim 1 wherein the exothermic generating particles are selected from the group consisting of uncomplexed metals, metal salts, metal oxides, metal hydroxides, metal hydrides and mixtures thereof, wherein the metals are selected from the group consisting of beryllium, magnesium, lithium, sodium, calcium, potassium, iron, copper, zinc, aluminum and mixtures thereof.

8. The reaction mixture of claim 7 wherein the exothermic generating particles are selected from the group consisting of beryllium hydroxide, beryllium oxide, beryllium oxide monohydrate, lithium aluminum hydride, calcium oxide, calcium hydride, potassium oxide, magnesium chloride, magnesium sulfate, aluminum bromide, aluminum iodide, sodium tetraborate, sodium phosphate and mixtures thereof.

9. The reaction mixture of claim 1 wherein the exothermic generating particles have an average particle diameter of from about 10 microns to about 1000 microns.

10. The reaction mixture of claim 1 wherein the buffer is selected from the group consisting of citric acid, malic, acid, fumaric acid, succinic acid, tartaric acid, formic acid, acetic acid, propanoic acid, butyric acid, valeric acid, oxalic acid, malonic acid, glutaric acid, adipic acid, glycolic acid, aspartic acid, pimelic acid, maleic acid, phthalic acid, isophthalic acid, terphthalic acid, glutamic acid, lactic acid, hydroxyl acrylic acid, alpha hydroxyl butyric acid, glyceric acid, tartronic acid, salicylic acid, gallic acid, mandelic acid, tropic acid, ascorbic acid,

gluconic acid, cinnamic acid, benzoic acid, phenylacetic acid, nicotinic acid, kainic acid, sorbic acid, pyrrolidone carboxylic acid, trimellitic acid, benzene sulfonic acid, toluene sulfonic acid, potassium dihydrogen phosphate, sodium hydrogen sulfite, sodium dihydrogen phosphate, potassium hydrogen sulfite, sodium hydrogen pyrosulfite, acidic sodium hexametaphosphate, acidic sodium pyrophosphate, acidic potassium pyrophosphate, sulfamic acid, ortho-phosphoric acid, pyro-phosphoric acid and mixtures thereof.

11. The reaction mixture of claim 1 wherein the ratio by weight of the exothermic generating particles to the buffer is in the range of from 200:1 to 1:200.

12. The reaction mixture of claim 1 where the anti-foam agent is selected from the group consisting of silicone antifoam compound, an alcohol antifoam compound, light petroeum odorless hydrocarbons, fatty acid esters, fatty acid esters of monovalent alcohols, aliphatic C18-C40 ketones, nonionic polyhdroxyl derivatives and mixtures thereof.

13. The reaction mixture of claim 1 further comprising a thickening agent selected from the group consisting of polyacrylic acids, gums, cellulose, thoxylated cellulose, carboxymethylcellulose, hydroxymethylcellulose, hydroxypropyl cellulose, hydroxyethyl cellulose, clay, silica, and any mixtures thereof.

14. The reaction mixture of claim 1 further comprising a water soluble visual enhancement agent selected from the group consisting of a dye, a chemiluminescence agent, a fluorescence agent, a pearlescence agent, and mixtures thereof.

15. The reaction mixture of claim 12 wherein the visual enhancement agent is selected from the group consisting of fire-fly luciferase, adenosinetriphosphate, ethylene glycol disteate and mixtures thereof.

16. A process for generating heat through a continuous phase system, the process comprising the steps of:

a) providing exothermic generating particles comprising a water soluble coating that entirely encases the exothermic generating particles, wherein the water soluble coating comprises PEG having a molecular weight from 2000-6000;
b) providing a volatile component, an anti-foaming agent, and a buffer; and
c) adding the coated exothermic generating particles, the volatile component, and the buffer into an aqueous solution.

17. The process of claim 14 step (b) further comprising the step of providing a thickening agent.

18. An apparatus for generating heat comprising a container and the following reaction components:
a) a water soluble coating entirely enclosing exothermic generating particles wherein the water soluble coating comprises PEG having a molecular weight from 2000-6000;
b) a volatile component;
c) a buffer; and
d) a thickening agent.

19. The apparatus of claim 16 wherein the reaction mixture further comprises an aqueous solution.

20. The apparatus of claim 17 wherein a reaction mixture is created when the reaction components are mixed together, and the temperature of the reaction mixture increases to a Set Temperature that is greater than about 35°C and less than about 75°C.

21. The apparatus of claim 16 wherein the reaction mixture remains within 10° C of the Set Temperature for at least about 45 minutes.

22. The apparatus of claim 16 further comprising a light emitting device capable of emitting a variety of colors, preferably the light emitting device is a light emitting diode.